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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/583,183	03/12/2007	Maurice Morency	2003390-0031	8998
24280 7590 06/17/2009 CHOATE, HALL & STEWART LLP TWO INTERNATIONAL PLACE BOSTON, MA 02110			EXAMINER TAKEUCHI, YOSHITOSHI	
			ART UNIT 1793	PAPER NUMBER
			NOTIFICATION DATE 06/17/2009	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@choate.com

<p align="center"><b>Advisory Action</b> <b>Before the Filing of an Appeal Brief</b></p>	<p><b>Application No.</b> 10/583,183</p>	<p><b>Applicant(s)</b> MORENCY ET AL.</p>	
	<p><b>Examiner</b> YOSHITOSHI TAKEUCHI</p>	<p><b>Art Unit</b> 1793</p>	

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 26 May 2009 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.  
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

#### AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because  
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);  
(b) ☐ They raise the issue of new matter (see NOTE below);  
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).  
5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.  
6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
7. ☐ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.  
The status of the claim(s) is (or will be) as follows:  
Claim(s) allowed: \_\_\_\_\_.  
Claim(s) objected to: \_\_\_\_\_.  
Claim(s) rejected: 1-21 and 31-33.  
Claim(s) withdrawn from consideration: \_\_\_\_\_.

#### AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).  
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).  
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

#### REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:  
See Continuation Sheet.  
12. ☐ Note the attached Information *Disclosure Statement*(s). (PTO/SB/08) Paper No(s). \_\_\_\_\_.  
13. ☐ Other: \_\_\_\_\_.

/Roy King/  
Supervisory Patent Examiner, Art Unit 1793

/YOSHITOSHI TAKEUCHI/  
Examiner, Art Unit 1793

Continuation of 11. does NOT place the application in condition for allowance because:

1. Applicant's arguments filed May 26, 2009 have been fully considered but they are not persuasive.  
The applicant makes two arguments:
2. First, that the Final Office Action has not properly established a prima facie case of obviousness and second, that even if a prima facie case of obviousness could be established, the claimed invention presents unexpected advantages over the cited references and are thus innovative and non-obvious.
3. Regarding the first argument, the applicant more particularly argues that none of the references teach or suggest three aspects of step (d) of claim 1: (i) adding to the slurry obtained in step c) an anionic surfactant as particle dispersant; (ii) that this addition both desorbs the ferrites from the magnetite and disperses the ferrites relative to each other; and (iii) the order in which the anionic surfactant is added, that is after performing steps (a), (b) and (c).
  - a. In response, during patent prosecution, the claims are given the broadest reasonable interpretation (MPEP § 2111). In addition, although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. In re Van Geuns, 988 F.2d 1181 (Fed. Cir. 1993). See also MPEP § 2145(VI). Claim (d) recites, "adding to the slurry obtained in step c) an anionic surfactant to disperse the ferrite particles adsorbed on the magnetite particles." The examiner respectfully notes that by not raising the issue, the applicant impliedly admits that the prior art references cited in the prior action teach or suggests steps (a) through (c) and (e) of claim 1.
  - b. Regarding applicant's first sub-argument that Jebrak "only suggests using a 'deflocculant' or 'dispersant' as a means of improving separation of the ferrite and magnetite particles" (response to the Office action p.3), a reference may be relied upon for all that it would have reasonably suggested to one having ordinary skill in the art, including nonpreferred embodiments. Merck & Co. v. Biocraft Laboratories, 874 F.2d 804 (Fed. Cir.), cert. denied, 493 U.S. 975 (1989). See MPEP § 2123(I). Anionic surfactants are a broad, well-known category of deflocculants and are contemplated by the disclosure of Jebrak to disperse ferrite and magnetite particles.
  - c. Regarding applicant's second sub-argument that none of the reference art (Jebrak, Itoh or Weimer) teach or suggest the mechanism by which the ferrite and magnetite particles are separated (response to the Office action pp.3-4), such mechanism is not claimed and limitations from the specification are not read into the claims. In re Van Geuns, 988 F.2d 1181 (Fed. Cir. 1993). See also MPEP § 2145(VI).
  - d. Regarding applicant's third sub-argument that "a claimed species or subgenus is encompassed by a prior art genus is not sufficient by itself to establish a prima facie case of obviousness" (response to Office action p.5), the examiner respectfully notes that MPEP § 2144.08(II) supports a finding that a an ordinary person skilled in the art would have been motivated to select the claimed broad subgenus, such as anionic surfactants, within a genus of deflocculants, because of the required properties to separate the ferrite and magnetite particles.
  - e. The applicant further argues the various factors of MPEP § 2144.08(II), such as express teachings, predictability of the technology, structural similarities or dissimilarities, teachings of similar or dissimilar properties or uses (response of Office action, p.6. For future responses, if the MPEP is being cited, the examiner respectfully requests the applicant to provide pinpoint citation to the MPEP for large sections, such as §2144). In response, where if even one factor outweighs the other factors, that one factor may overpower the others. The examiner finds that a person of ordinary skill in the art would be motivated to use an anionic surfactant in the method taught by Jebrak.
4. Regarding the second argument, the applicant more particularly argues (i) adding an anionic surfactant as dispersant presents advantages over other types of dispersants by decreasing cohesion between the ferrite and magnetite particles causing desorption of the ferrite from the magnetite particles, and reducing the positive charge of the ferrite particles to increase the repulsion between the ferrite particles within the slurry thus improving the dispersing effect the ferrites relative to each other in the slurry; and, (ii) adding an anionic surfactant occurs at an advantageous entry point within the claimed process, after performing claim 1 steps (a), (b) and (c), which improves the dispersing effect of step (d) (response to Office action pp. 7-8); (iii) unexpected results of the phosphate sequestering calcium compounds within the slurry to allow for improved treatment of the resulting slurry; and, (iv) sodium metaphosphate allows improved conversion of calcium and calcium hydroxides present in the slurry into a calcium phosphate which is precipitated as a solid.
  - a. In response to the first two sub-arguments, the claims are given the broadest reasonable interpretation during patent prosecution (MPEP § 2111). In addition, although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. In re Van Geuns, 988 F.2d 1181 (Fed. Cir. 1993). See also MPEP § 2145(VI). As discussed supra, the art references teach and suggest the instantly claimed invention of claim 1.
  - b. In response to the third and fourth sub-arguments, the reasons to combine the art references need not be the same as the motivations provided by the applicant. The motivation need only comply with MPEP § 2144, which indicates that rationale for a rejection may be in a reference, or reasoned from common knowledge in the art, scientific principles, art-recognized equivalents, or legal precedent. It would have been obvious to a person of ordinary skill at the time of the invention to add sodium metaphosphate to the hydrometallurgy process taught by Jebrak as a surfactant in order to keep the particles separated, since sodium metaphosphate is known to reduce the magnetic attraction between iron oxide particles, and the Jebrak process taught the use of a deflocculant in order to ease the magnetic separation of particles.
5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to YOSHITOSHI TAKEUCHI whose telephone number is (571) 270-5828. The examiner can normally be reached on Monday-Thursday 9:30-3:00. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Roy King can be reached on (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you

would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/YOSHITOSHI TAKEUCHI/  
Examiner, Art Unit 1793